

## REMARKS

Claims 1-25 were pending in the application at the time of the Office Action. The Office Action rejected claims 1-3, 5-10 and 12-22 as being anticipated by the prior art. The Office Action objected to claims 4, 11 and 23-25 as being dependent on a rejected claim, but indicated that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this response applicant has amended claims 1, 5, 6, 8, 11-13, 15, 18, 20 and 22-25, cancelled claims 3-4 and 10, and added new claims 26-36. In view of the foregoing, claims 1-2, 5-9 and 11-36 are presented to the Examiner for consideration on the merits.

### **A. Amendment to the Claims**

By this amendment independent claim 1 was amended to substantially incorporate the limitations of claims 3 and 4. Dependent claims 5 and 6 have been amended to correct antecedent bases and to further clarify the invention. Claim 8 has been amended to substantially incorporate the limitations of claim 10, to correct antecedent bases, and to further clarify the invention. Claim 11 has been amended to correct the dependency thereof. Claim 12 has been amended to correct antecedent bases and to clarify the invention. Claims 13 and 15 have been amended to further clarify the invention. Claim 18 has been amended to correct antecedent bases. Claim 20 has been amended to correct antecedent bases and to further clarify the invention. Claim 22 has been amended to further clarify the invention. Claim 23 has been amended to correct dependency thereof. Claim 24 has been amended to correct dependency thereof and to further clarify the invention. Claim 25 was amended to further clarify the invention. Thus, Applicant respectfully submits that the amendments to claims 1, 5, 6, 8, 11-13,

15, 18, 20 and 22-25 are supported by the specification as originally filed and no new matter has been added. Entry thereof is respectfully requested.

New claims 26 – 36 are supported by the specification as originally filed. As such, applicant respectfully submits that no new matter has been added and requests entry thereof.

**B. Anticipation Rejection**

The Office Action rejected claims 1-3, 5-10 and 12-22 under 35 U.S.C 102 (a) as being anticipated by U.S. Patent Number 6,159,244 to Suddaby (hereinafter the ‘244 patent). By this response applicant has cancelled claims 3 and 10 and thus submits that the anticipation rejection with respect to claims 3 and 10 is rendered moot.

As depicted in Figures 1-3 and discussed at column 4, the ‘244 patent discloses an expandable intervertebral fusion implant which includes a pair of mating metal shells 10, 12.

The ‘244 patent states that to

“install an implant, the shells, preassembled in their fully collapsed configuration, are placed in the selected empty intervertible space by means of an expandable tool (not shown), with its jaws retracted. Then the jaws are spread apart, forcing the shells outward into contact with the bones above and below. . . . Once the jaws are retracted, the tool can be removed from the site, and the implant remains expanded.”

Col. 5, lines 3-11.

With regard to the installation tool, the ‘244 patent also states that the “installation tool is then unscrewed and disengaged, leaving the component parts as a stable assembly that can be packed with bone to promote osseous union” (col. 3, ll. 8-10) and that the shells can be “distracted, or spread apart, by a screw-type installation tool until optimal distraction of the

vertebral elements and appropriate tension on the ligamentous structures is achieved.” Col. 3, ll. 21-24.

The ‘244 patent goes on to disclose that

[t]he shells form an open-ended structure. It may be desired to close one or both ends. If so, an end cap may be applied over an open end. Preferred end caps, include a oval plate 40 having slight outward concavity (FIG. 5) or convexity (FIG. 6) corresponding to the shapes of the ends of the implant. The cap is retained on the implant by a pair of arms 42,44 each of which has a hook 46 or the like at its free end, for engaging over the far end of the implant. Grooves or other structure, not shown, may be provided on the implant surfaces to retain the caps more securely.

Col. 4, lines 51-60.

With regard to independent claim 1, the Office Action indicated that the subject matter of claim 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this amendment applicant has substantially amended claim 1 to incorporate the limitations of claims 1, 3, and 4 as originally filed. As such, applicant respectfully submits that independent claim 1 is distinguishable over the cited prior art for substantially the same reasons that claim 4 for considered to be allowable over the cited prior art. More specifically, applicant submits that the ‘244 patent does not disclose or suggest “removably securing a distal end of an inserter to an adjustable fusion implant” and “sliding a reinforcing member along the inserter so that the reinforcing member couples with the expanded fusion implant,” as recited in independent claim 1. As such applicant respectfully requests that the anticipation rejection with respect to claim 1 be withdrawn.

Claims 2 and 5-7 depend from independent claim 1 and thus incorporate the limitations thereof. As such, applicant respectfully submits that claims 2 and 5-7 are distinguishable over the ‘244 patent for substantially the same reasons as claim 1. As such, applicant respectfully requests that the anticipation rejection with respect to claims 2 and 5-7 be withdrawn.

With regard to independent claim 8, as discussed above the '244 patent discloses the installation of the fusion implant using an expandable tool. The '244 patent, however, does not disclose or suggest “removably securing a distal end of an inserter to an adjustable fusion implant” and “sliding an expansion tool along the inserter so that at least a portion of the expansion tool is removably received within the fusion implant, the expansion tool being adapted to facilitate expansion of the fusion implant,” as recited in independent claim 8. As such, Applicant respectfully request that the anticipation rejection with respect to claim 8 be withdrawn.

Claims 9 and 11-14 depend from independent claim 8 and thus incorporate the limitations thereof. As such, applicant respectfully submits that claims 9 and 11-14 are distinguishable over the '244 patent for at least the same reasons that claim 8 is distinguishable. As such, applicant respectfully requests that the anticipation rejection of claims 9 and 11-14 be withdrawn.

With regard to independent claim 15, the '244 patent merely discloses that the expandable tool can be used to install the implant. The '244 patent, however, does not disclose or suggest “mechanically interlocking an inserter to an adjustable fusion implant such that the inserter is temporarily fixed to the fusion implant,” as recited in claim 15.

Furthermore, even assuming *arguendo* that the claimed “reinforcing member” is interpreted to read on cap 40 of the '244 patent, the '244 patent clearly does not disclose or suggest “coupling a reinforcing member to the expanded fusion implant using the inserter as a guide for the reinforcing member,” as recited in independent claim 15. As such, applicant respectfully requests that the anticipation rejection with respect to claim 15 be withdrawn.

Claims 16-19 depend from independent claim 15 and thus incorporate the limitations thereof. As such, it is respectfully submitted that claims 16-19 are distinguishable over the '244

patent for at least the same reasons that claim 15 is distinguishable. As such, the applicant respectfully requests that the anticipation rejection with respect to claims 16-19 be withdrawn.

With respect to independent claim 20, the '244 patent discloses that the end caps include an oval plate 40 having a pair of arms 42, 44 extending therefrom. Because the end caps of the '244 patent do not include a cavity, applicant submits that the '244 patent does not disclose or suggest "at least partially packing a cavity of a reinforcing member with an osteogenic substance," as recited in independent claim 20. Likewise, the '244 patent does not disclose or suggest "sliding the reinforcing member packed with the osteogenic substance into at least a portion of the compartment of the housing after expansion of the housing," as recited in independent claim 20. As such, applicant respectfully requests that the anticipation rejection with respect to claim 20 be withdrawn.

Claims 21-25 depend from independent claim 20 and thus incorporate the limitations thereof. As such, claims 21-25 are distinguishable over the '244 patent for at least the same reasons that claim 20 is distinguishable. As such, applicant respectfully requests that the anticipation rejection with respect to claims 21-25 be withdrawn.

No other rejections or objections were maintained in the Office Action.

**C. New Claims**

Applicant respectfully submits that the new claims 26-36 are also allowable over the '244 patent. Each of new claims 26-36 are dependent from independent claim 1, 8 or 15 and thus incorporate the limitations thereof. As such, applicant respectfully submits that new claims 26-36 are distinguishable over the '244 patent for at least the same reasons that claims 1, 8 and/or 15

are distinguishable. As such, applicant respectfully submits that new claims 26-36 are in condition for allowance.

**D. Conclusion**


Applicant notes that this response does not discuss every reason why the claims of the present application are distinguished over the cited prior art. Most notably, applicant submits that many if not all of the dependent claims are independently distinguishable over the cited prior art. Applicant has merely submitted those arguments which it considers sufficient to clearly distinguish the claims over the cited prior art.

In view of the foregoing, applicant respectfully requests the Examiner's reconsideration and allowance of claims 1-2, 5-9 and 11-36 as amended and presented herein.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 29, day of June 2004.

Respectfully submitted,

  
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